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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,509	03/14/2001	Yoshitaka Dansui	L7016.01105	1885

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EXAMINER

HODGE, ROBERT W

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,509

Applicant(s)

DANSUI ET AL.

Examiner

Robert Hodge

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 18 is/are pending in the application.
- 4a) Of the above claim(s) 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicants submit that the recitation in claim 1 does not allow for “the nickel hydroxide particles of the present invention” to be treated “with the aqueous alkaline solution and oxidizing agent”, which is taught by Ogasawara et al. And “Furukawa et al. fails to cure the deficiencies of Ogasawara et al.” as previously noted.
2. Applicant's arguments filed September 23, 2004 have been fully considered but they are not persuasive because they are not commensurate with the scope of the claim. Applicant argues that the Ogasawara et al. reference does not teach that the nickel hydroxide particles are not treated with an aqueous alkaline solution and oxidizing agent. However claim 1 uses open claim language and no recitation is made that the nickel hydroxide particles are not treated with an aqueous alkaline solution and oxidizing agent. Therefore as written any source of nickel hydroxide particles meets the scope of the claim, regardless of how it is formed or treated. It is the examiner's position that the previously made rejections are still proper thus those rejections are maintained.
3. Applicants should be aware that in a product by process claim, applicants must show that the process materially alters the product to overcome a rejection made on the product by the prior art, which show the product is known.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6-10 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,576,368 to Ogasawara et al. Hereinafter '368. Claims 1-3, 6-10, 18 and the '368 reference disclose a nickel positive electrode active material comprising nickel hydroxide particles and at least one rare earth compound (claim 1), the at least one rare earth compound having characteristics produced by treating a rare earth oxide with an aqueous alkaline solution and an oxidizing agent (claims 2 and 9). The '368 reference discloses the claim limitations by disclosing the manufacture of a positive active material, obtainable by combining nickel hydroxide with yttrium oxide, wherein the yttrium oxide is treated with an aqueous solution of sodium hydroxide (claim 6) and an aqueous sodium hypochlorite (claim 7) oxidizing solution. Column 5, lines 13-63.

6. As to claim 3, disclosing an yttrium content of 3% with respect to the amount of nickel hydroxide, this meets the claim limitations of 0.1 to 4% based on nickel hydroxide particles. See column 5, line 59 *et seq.*

7. As to claims 8 and 10, disclosing that the above system includes a negative electrode and a hydrogen absorbing alloy and a separator. Column 3, line 65 *et seq.* Disclosing that the sealed alkaline storage battery of the present invention includes the

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positive electrode of the present invention, a negative electrode and a hydrogen storage alloy electrode. The separator is inherent in every battery, and is disclosed at column 6, line 7 *et seq.* "a separator made of polyamide nonwoven fabric."

8. The examiner notes that claim 18 is admitted to be a product-by-process claim by the applicants. "Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps". See MPEP § 2113.

Therefore because all of the structure recited in claim 18 is present in the '389 reference, claim 18 is included in the above 102(e) rejection.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over '368 as discussed above in view of United States Patent No. 6,136,473 Furukawa et al. Hereinafter Furukawa.

11. With specific respect to claims 4 and 5, further limiting claim 2, and disclosing that the rare earth compound is a combination of the yttrium/ytterbium compound and the lutetium compound, wherein the two compounds meet $50 \geq X \geq 5$, when weights of the yttrium compound and the lutetium compound are (100-X) % by weight and X % by weight, respectively. Each and every limitation of claims 4 and 5 are disclosed in '368

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as set forth above, except that the '368 reference fails to fails to explicitly disclose that the rare earth combination is yttrium-lutetium compound and ytterbium-lutetium compound. Wherein the two compounds (Y/Yb-Lu) meet $50 \geq X \geq 5$, when weights of the yttrium (or ytterbium) compound and the lutetium compound are (100-X) % by weight and X % by weight, respectively. Furukawa discloses that two or more kinds of selected rare earth elements are ytterbium and lutetium, and a ratio of the content of ytterbium to the contents of ytterbium and lutetium is larger than or equal to 0.75 when converted to an amount of oxide. See e.g. column 5, line 44 *et seq.* also see e.g. column 28, lines 5-10. Ytterbium is disclosed as a specific example of a rare earth, Y, is also disclosed as a desirable rare earth. The artisan would have been motivated to make the instant combination for the reason explicitly disclosed in Furukawa, namely, a composite compound having Yb and Lu as its principal component, for example, is inexpensive because it is formed as an eutectoid when separating and forming the rare earth element from ore. See e.g. column 5, line 51 *et seq.* Additionally the artisan would have been motivated to make the combination because Y, Ho, Er, Tm, Yb and Lu etc. have an effect of shifting the oxygen evolution potential to a more noble potential, thus reducing the likelihood of gas evolution during overcharging. See also column 25, line 48-54, disclosing Yb and Lu and optionally Y.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Hodge whose telephone number is (571) 272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

RWH 11-9-04

Bruce Bell
BRUCE F. BELL
PRIMARY EXAMINER
GROUP 1746